

PRODUCT INFORMATION



Cuprizone

Item No. 44456

CAS Registry No.: 370-81-0

Formal Name: ethanedioic acid, 1,2-bis(2-cyclohexylidenehydrazide)

Synonyms: CPZ, bis-Cyclohexanone oxaldihydrazone, bis(Cyclohexylidenehydrazide), NSC 4283

MF: $C_{14}H_{22}N_4O_2$

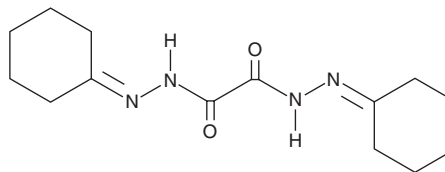
FW: 278.4

Purity: $\geq 95\%$

Supplied as: A solid

Storage: -20°C

Stability: ≥ 4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Cuprizone is supplied as a solid. A stock solution may be made by dissolving the cuprizone in the solvent of choice, which should be purged with an inert gas. Cuprizone is slightly soluble (0.1-1 mg/ml) in acetonitrile:water (1:1).

Description

Cuprizone is a copper chelator and neurotoxicant.¹ It is selectively cytotoxic to mature differentiated primary rat oligodendrocytes over SH-SY5Y neuroblastoma cells and primary rat microglia, astrocytes, and oligodendrocyte precursor cells at 500 μM . Cuprizone has commonly been used to induce demyelination in mouse models of demyelinating diseases, such as multiple sclerosis.²

References

1. Bénardais, K., Kotsiari, A., Skuljec, J., *et al.* Cuprizone [bis(cyclohexylidenehydrazide)] is selectively toxic for mature oligodendrocytes. *Neurotox. Res.* **24**(2), 244-250 (2013).
2. Zhan, J., Mann, T., Joost, S., *et al.* The cuprizone model: Dos and do nots. *Cells* **9**(4), 843 (2020).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 12/01/2025

CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897
[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM